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EXAMINER

TSAI, CAROL S W

ART UNIT PAPER NUMBER

2857

DATE MAILED: 01/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/593,170

Applicant(s)

YING, JEFFREY

Examiner

Carol S Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

At page 41, line 18, "main menu function 607" should read

-- main menu function 601 --.

Appropriate correction is required.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Reference character "145" in Fig. 3.

Reference character "165" in Fig. 4.

Reference character "250" in Fig. 7.

Reference character "270", "271", "272", and "275" in Fig. 8.

Reference character "290", "291", "292", and "295" in Fig. 9.

Reference character "454" in Fig. 14.

Reference character "462", "463", "464", "465", "468", "469", "470", and "471" in Fig.

15.

Reference character "480" and "482" in Fig. 16. Reference character "731" and "751" in Fig. 27.

Reference character "882" in Fig. 28.

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A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. Claims 7, 8, and 20-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Regarding claims 7, 20, and 25, the phrase "may be" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "may be"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent 6,330,499 B1 to Chou et al.

With respect to claims 1 and 11, Chou et al. disclose a system for facilitating diagnosis and maintenance of electronic control networks, comprising a wireless diagnostic device (computer device 101 shown on Fig. 1) which comprises a transmitter and receiver for communicating over a wireless communication channel (communication link 150 shown on Fig. 1) with a control network (Intranet 150C, internet 150D, and public (or private) switch telephone network (PSTN) 150E shown on Fig. 1) via a control network wireless interface (network interface 320 shown on Fig. 2) and at least one wireless ground station (wireless base stations 150B shown on Fig. 1) comprising a ground station receiver attuned to the wireless communication channel by where transmitted messages between the wireless diagnostic device and the control network over the wireless communication channel are monitored (see Fig. 1; col. 2, lines 30-43; col. 3, line 47 to col. 5, line 33).

As to claim 20, Chou et al. also disclose a diagnostic and maintenance system, comprising: a wireless diagnostic device (computer device 101 shown on Fig. 1) which comprises a transmitter and receiver for communicating over a wireless communication channel (communication link 150 shown on Fig. 1) with a control network (Intranet 150C, internet 150D, and public (or private) switch telephone network (PSTN) 150E shown on Fig. 1) via a control network wireless interface; a plurality of wireless ground stations (wireless base stations 150B shown on Fig. 1), at least one of the wireless ground stations comprising a receiver attuned to

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the wireless communication channel by where transmitted messages between the wireless diagnostic device and the control network are monitored (see Fig. 1; col. 2, lines 30-43; col. 3, line 47 to col. 5, line 33); a ground station interface connected to the plurality of wireless ground stations (Intranet 150C, internet 150D, and public (or private) switch telephone network (PSTN) 150E shown on Fig. 1); and a local area computer network connected to the ground station interface, the local area computer network comprising one user terminal (see col. 3, lines 62-67 and col. 10, lines 48-51) that comprises a screen display by where information relating to the transmitted messages can be displayed (see col. 7, lines 4-15 and col. 9, lines 22-27 and lines 51-59).

As to claim 27, Chou et al. also disclose a diagnosis and maintenance system, comprising a wireless diagnostic device (computer device 101 shown on Fig. 1) which comprises a transmitter and receiver for communicating over a wireless communication channel (communication link 150 shown on Fig. 1) with one or more control network (Intranet 150C, internet 150D, and public (or private) switch telephone network (PSTN) 150E shown on Fig. 1), the wireless diagnostic device programmed to perform at least one diagnosis or test function relating to the one or more control network; and at least one wireless ground station (wireless base stations 150B shown on Fig. 1) comprising a ground station receiver attuned to the wireless communication channel by where transmitted messages between the wireless diagnostic device and one or more control networks over the wireless communication channel are monitored (see Fig. 1; col. 2, lines 30-43; and col. 3, line 47 to col. 5, line 33).

Chou et al. do not disclose expressly a plurality of diagnostic devices.

It is, however, considered inherent that Chou et al. adds a plurality of diagnostic devices in the diagnostic and maintenance system (see Figs. 1 and 3-5; col. 2, lines 30-43; col. 3, lines 15-46; and col. 5, line 34 to col. 6, line 47), because Chou et al. teach a remote service center comprising a diagnostic server that has access to data related to the vehicle such as as-built, history, diagnostics, warranty, service information and failure mode data and corrected from maintenance area via a TCP/IP link, LAN, or the like, a plurality of diagnostic devices would therefore necessarily be present.

As to claims 2, 12, 22, and 29, Chou et al. also disclose a memory device (storage 340 shown on Fig. 2) connected to at least one wireless ground station, for storing transmitted message monitored by the wireless ground station over the wireless communication channel (see col. 3, lines 47-61).

As to claims 3 and 13, Chou et al. also disclose at least one user terminal (see col. 3, lines 62-67 and col. 10, lines 48-51) connected to the wireless ground station, the user terminal comprising a graphical display by where information relating to the transmitted message is displayed (see col. 7, lines 4-15 and col. 9, lines 22-27 and lines 51-59).

As to claims 4 and 14, Chou et al. also disclose a user interface (user interface 105 shown on Fig. 5) and a ground station transmitter (see Figs. 1 and 5).

As to claims 5, 15, 23, and 30, Chou et al. also disclose instructions regarding diagnostic being transmitted by the ground station transmitter over the wireless communication channel in response to commands entered via the user interface (see col. 4, line 15 to col. 5, line 32).

As to claims 6, 24, and 31, Chou et al. also disclose an instruction to terminate a diagnostic session being transmitted by the ground station transmitter over the wireless

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communication channel in response to commands entered via the user interface (see col. 6, lines 6-14).

As to claims 7, 16, 25, and 32, Chou et al. also disclose a diagnostic and maintenance information database (data repository 203 shown on Figs.3-5) connected to at least one ground station by where information relating to the control network can be retrieved in response to a remote request received from the wireless diagnostic device (see col. 9, lines 13-22).

As to claims 8, 17, 26, and 33, Chou et al. also disclose graphical information relating to the control network, the graphical information being displayed on a screen display at the wireless diagnostic device (see col. 7, lines 4-15 and col. 9, lines 22-27 and lines 51-59).

As to claims 9, 18, 21, and 35, Chou et al. disclose a graphical display device (see col. 7, lines 4-15 and col. 9, lines 22-27 and lines 51-59).

Chou et al. do not disclose expressly a wireless intermediary unit, the wireless intermediary unit containing the transmitter and receiver for communicating over the wireless communication channel with the control network.

It is, however, consider inherent that Chou et al. adds a wireless intermediary unit containing the transmitter and receiver for communicating over the wireless communication channel with the control network (see Fig. 1), because Chou et al. teach communication between the display and the control network; a wireless intermediary unit would therefore necessarily be present,

As to claims 10, and 19, Chou et al. also disclose the wireless diagnostic device being configured to transmit, in response to an entered command, a forced output instruction to the control network over the wireless communication channel and the control network being

configured to response to the forced output instruction by selecting values for one or more inputs to a controlled electronic circuit such that an output of a control network element is forced to a predetermined state, in the absence of a fault condition (see col. 6, line 6 to col. 7, line 1).

As to claim 28, Chou et al. disclose a ground station interface (communication link 150 shown on Fig. 1) connected to the wireless ground station (wireless base stations 150B shown on Fig. 1); and a local area computer network connected to the ground station interface, the local area computer network (Intranet 150C, internet 150D, and public (or private) switch telephone network (PSTN) 150E shown on Fig. 1) comprising one user terminal (see col. 3, lines 62-67 and col. 10, lines 48-51) that comprises a screen display by where information relating to the transmitted messages can be displayed (see col. 7, lines 4-15 and col. 9, lines 22-27 and lines 51-59).

As to claim 34, Chou et al. also disclose the wireless diagnostic device being portable (see col. 3, lines 47-53).

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Menig et al. disclose an integrated message system for a vehicle provides an extendable, prioritized message scheme.

Fera et al. disclose a method and system for managing communication of electronic data

between a diagnostic service center and a plurality of machines generally remote relative to each other.

Gibson et al. disclose a method for analyzing fault log data and snapshot operational parameter data from a machine undergoing diagnostics.

Pierro discloses a method and system for identifying a plurality of critical faults in machines.

Shutty discloses a system for programming a vehicle control computer with selectable features and/or trim values including a first computer maintaining a web site containing vehicle control computer calibration information and a second computer operable to access the web site whereby the first computer is responsive to information provided by a user to generate a set of feature and/or trim values and to create a file of the set of feature and/or trim values along with a loading program.

Thibault discloses a system and method for automatically calculating safety-related compliance data for vehicle operators.

Fleeter discloses a remote sensing system including a plurality of sensors that are distributed about an area of interest, and a satellite communications system that receives communications signals from these sensors.

Pierro et al. disclose an apparatus and method of predicting vehicle breakdown and operability including monitoring at a monitoring station on-board systems parameter data transmitted from a vehicle from a remote location; determining whether any of the monitored data is out of a predetermined range; calculating trends for monitored data determined to be out

of range; identifying any system fault; and predicting what vehicle system(s) must be corrected to avoid vehicle failure and when such system(s) are likely to fail unless corrected.

Nathanson discloses a mobile automotive telemetry system for installation on-board a vehicle, including: (i) diagnostic structure for monitoring operational functions of the vehicle and generating operational information; (ii) a memory for storing the generated operational information; and (iii) a server, in communication with the diagnostic structure and the memory. the server includes: (a) structure to receive a request from a remote client for the generated operational information; (b) structure to retrieve the generated operational information from the memory; and (c) structure to transmit the generated operational information to the remote client.

### ***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. Tsai whose telephone number is (703) 305-0851. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703) 308-1677. The fax number for TC 2800 is (703) 308-7722 or (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (703) 308-1782.

In order to reduce pendency and avoid potential delays, Group 2800 is encouraging FAXing of responses to Office actions directly into the Group at (703) 308-7722 or (703) 308-7724. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account.

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Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800 will be promptly forwarded to the examiner.

Carol S. Tsai

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